



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2010-1042; FRL-9967-01-OAR]

RIN 2060-AT13

National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass

Manufacturing; Rotary Spin Lines Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: In this action, the Environmental Protection Agency (EPA) is proposing amendments to previous proposals to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Wool Fiberglass Manufacturing source category. In the July 29, 2015, final rulemaking, the EPA deferred action on previously proposed formaldehyde, methanol and phenol emission limits from rotary spin (RS) lines at wool fiberglass manufacturing facilities. In this action, the EPA is proposing to readopt the existing emission limits for formaldehyde, to establish emission limits for methanol, and to establish a work practice standard for phenol emissions from bonded RS lines at wool fiberglass manufacturing facilities. In addition, the EPA is proposing amendments to the emission limits promulgated on July 29, 2015, for formaldehyde, methanol, and phenol from flame attenuation (FA) lines at wool fiberglass manufacturing facilities. The EPA is only taking comments on the specific proposed requirements and revisions set forth in this proposed rulemaking, which are based on information contained in this proposal. The EPA is not taking comment on any aspect of previous

rulemakings, including the November 25, 2011, April 15, 2013, and November 13, 2014, proposals.

DATES: The EPA must receive written comments on this proposed rule on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Public Hearing. If a public hearing is requested by **[INSERT DATE 7 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, then we will hold a public hearing on **[INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The last day to pre-register in advance to speak at the public hearing will be **[INSERT DATE 13 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2010-1042, at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

Public Hearing. If a hearing is requested, it will be held at the EPA WJC East Building, 1201 Constitution Avenue, NW, Washington, DC 20004. If a public hearing is requested, then we will provide additional details about the public hearing on our Web site at <https://www.epa.gov/stationary-sources-air-pollution/wool-fiberglass-manufacturing-national-emissions-standards>. To request a hearing, to register to speak at a hearing, or to inquire if a hearing will be held, please contact Aimee St. Clair at (919) 541-1063 or by email at stclair.aimee@epa.gov. The EPA does not intend to publish any future notices in the **Federal Register** regarding a public hearing on this proposed action and directs all inquiries regarding a hearing to the Web site and contact person identified above.

FOR FURTHER INFORMATION CONTACT: For questions about this proposed action, contact Mr. Brian Storey, Office of Air Quality Planning and Standards, Sector Policies and Programs Division (D243-04), Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541-1103; fax number: (919) 541-5450; email address: storey.brian@epa.gov.

SUPPLEMENTARY INFORMATION:

Docket. The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2010-1042. All documents in the docket are listed in the Regulations.gov index. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically at <https://www.regulations.gov> or in hard copy at the EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m.,

Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

Instructions. Direct your comments to Docket ID No. EPA-HQ-OAR-2010-1042. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <https://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <https://www.regulations.gov> or email. The <https://www.regulations.gov> Web site is an "anonymous access" system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <https://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at <https://www.epa.gov/dockets>.

Public Hearing. If requested by **[INSERT DATE 7 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a public hearing will be held on

[INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL

REGISTER] at the EPA WJC East Building, 1201 Constitution Avenue, NW, Washington, DC

20004. If a public hearing is requested, then we will provide additional details about the public

hearing on our Web site at <https://www.epa.gov/stationary-sources-air-pollution/wool->

fiberglass-manufacturing-national-emissions-standards. In addition, you may contact Aimee St.

Clair at (919) 541-1063 or email at stclair.aimee@epa.gov with public hearing inquiries. The last

day to pre-register to speak at a hearing, if one is held, will be **[INSERT DATE 13 DAYS**

AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Additionally,

requests to speak will be taken the day of the hearing at the hearing registration desk, although

preferences on speaking times may not be able to be fulfilled. Please note that registration

requests received before the hearing will be confirmed by the EPA via email.

The EPA will make every effort to accommodate all speakers who arrive and register. If the hearing is held at a U.S. governmental facility, individuals planning to attend the hearing should be prepared to show valid picture identification to the security staff to gain access to the meeting room. Please note that the REAL ID Act, passed by Congress in 2005, established new requirements for entering federal facilities. If your driver's license is issued by Alaska, American Samoa, California, Guam, Idaho, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, New Hampshire, New York, North Carolina, North Dakota, Northern Mariana Islands, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, Texas, Virgin Islands, Virginia, or the state of Washington, you must present an additional form of identification to enter the federal building. Acceptable alternative forms of identification include: federal employee badges, passports, enhanced driver's licenses, and military identification cards. In addition, you will need to obtain a property pass for any personal

belongings you bring with you. Upon leaving the building, you will be required to return this property pass to the security desk. No large signs will be allowed in the building, cameras may only be used outside of the building and demonstrations will not be allowed on federal property for security reasons.

Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

BACT	best available control technology
CAA	Clean Air Act
CBI	Confidential Business Information
CD-ROM	Compact Disc Read-Only Memory
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FA	flame attenuation
FR	Federal Register
FTIR	Fourier Transform Infrared
HAP	hazardous air pollutants
ICR	information collection request
LAER	lowest achievable emission rate
lb/ton	pounds per ton
MACT	maximum achievable control technology
MIR	maximum individual risk
NESHAP	national emission standards for hazardous air pollutants
NRDC	Natural Resource Defense Council
OAQPS	Office of Air Quality Planning and Standards
OMB	Office of Management and Budget
PF	phenol-formaldehyde
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
RS	rotary spin
UMRA	Unfunded Mandates Reform Act
NTTAA	National Technology Transfer and Advancement Act
tpy	tons per year

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I. General Information

A. Does this action apply to me?

Table 1 of this preamble lists the NESHAP and associated regulated industrial source category that is the subject of this proposal. Table 1 of this preamble is not intended to be exhaustive, but rather provides a guide for readers regarding the entities likely to be affected by this proposed action.

Table 1. NESHAP and Industrial Source Categories Affected By This Proposed Action

Source category	NESHAP	NAICS code ¹
Wool Fiberglass Manufacturing	Subpart NNN	327993

¹ North American Industry Classification System.

The proposed standards, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities are not affected by this proposed action.

In 1992, the EPA defined the Wool Fiberglass Manufacturing source category as any facility engaged in producing wool fiberglass from sand, feldspar, sodium sulfate, anhydrous borax, boric acid, or any other materials. In the wool fiberglass manufacturing process, molten glass is formed into fibers that are bonded with an organic resin to create a wool-like material that is used as thermal or acoustical insulation. The category includes, but is not limited to, the following processes: glass-melting furnace, marble forming, refining, fiber forming, binder application, curing, and cooling. Facilities produce bonded building insulation using an RS manufacturing line, and bonded pipe insulation and other heavy-density products using an FA manufacturing line. If you have any questions regarding the applicability of the proposed

amendments, contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this action is available on the Internet. A redline version of the regulatory language that incorporates the proposed changes in this action is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2010-1042). Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of the proposal and key technical documents at this same Web site. Information on the overall residual risk and technology review (RTR) program is available at <https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html>.

C. What should I consider as I prepare my comments for the EPA?

For comments on this proposal, do not submit information containing CBI to the EPA through <https://www.regulations.gov> or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD-ROM that you mail to the EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI for inclusion in the public docket. If you submit a CD-ROM or disk that does not contain CBI, mark the outside of the disk or CD-ROM clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. Send or deliver information identified as CBI

only to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2010-1042.

If you have any questions about CBI or the procedures for claiming CBI, please consult the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

II. Background

A. What is the statutory authority for this action?

The statutory authority for this action is provided by sections 112 and 301 of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 *et seq.*). Section 112 of the CAA establishes a comprehensive regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, after the EPA has identified categories of sources emitting one or more of the HAP listed in CAA section 112(b), CAA section 112(d) requires us to promulgate technology-based NESHAP for those sources. “Major sources” are those that emit or have the potential to emit 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any combination of HAP. For major sources, the technology-based NESHAP must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts) and are commonly referred to as maximum achievable control technology (MACT) standards. Additionally, CAA section 112(h) allows the agency to adopt a work practice standard in lieu of a numerical emission standard only if it is “not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant.” This phrase is defined as applying where “the Administrator determines that the application of measurement methodology to a

particular class of sources is not practicable due to technological and economic limitations.” CAA section 112(h)(1) and (2).

The EPA is required to review the technology-based standards and revise them “as necessary (taking into account developments in practices, processes, and control technologies)” no less frequently than every 8 years. CAA section 112(d)(6). In conducting this review, the EPA is not required to recalculate the MACT floor. *Natural Resources Defense Council (NRDC) v. EPA*, 529 F.3d 1077, 1084 (D.C. Cir. 2008). *Association of Battery Recyclers, Inc. v. EPA*, 716 F.3d 667 (D.C. Cir. 2013).

In this action, the EPA is proposing to complete a technology review for RS lines in accordance with section 112(d)(6) of the CAA. In addition, the EPA is proposing to amend certain emission limits promulgated on July 29, 2015, as part of the RTR for the standards for FA lines at wool fiberglass manufacturing facilities.

B. What is the regulatory history for wool fiberglass manufacturing?

The EPA promulgated the Wool Fiberglass Manufacturing NESHAP on June 14, 1999 (62 FR 31695). The 1999 NESHAP, which is codified at 40 CFR part 63, subpart NNN, includes emissions standards for formaldehyde emissions from new and existing RS lines. On July 29, 2015, we published the final rule amendments to the Wool Fiberglass Manufacturing NESHAP resulting from our completion of certain aspects of the CAA section 112(f)(2) residual risk review and the CAA section 112(d)(6) technology review for that NESHAP RTR. 80 FR 45280. Specifically, the July 29, 2015, final rule:

(1) established a chromium emissions limit for gas-fired, glass-melting furnaces under CAA section 112(f)(2);

(2) revised the particulate matter limit for gas-fired, glass-melting furnaces at major sources under CAA section 112(d)(6);

(3) established work practice standards for hydrogen chloride and hydrogen fluoride emissions from glass-melting furnaces at wool fiberglass manufacturing facilities under CAA section 112(h);

(4) eliminated the use of formaldehyde as a surrogate and established revised limits for formaldehyde and first-time limits for methanol and phenol emitted from FA lines under CAA sections 112(d)(2) and (d)(3);

(5) eliminated FA line subcategories;

(6) removed the exemption for startup and shutdown periods and established work practice standards that apply during startup and shutdown periods; and

(7) established a chromium emission limits for both new and existing gas-fired, glass-melting furnaces at area sources in the Wool Fiberglass Manufacturing source category under CAA section 112(d)(5).

In the July 2015 rule, we did not finalize proposed emissions limits for formaldehyde, methanol, and phenol emissions from forming cooling and collection processes on bonded RS lines under CAA sections 112(d)(2) and (3). We explained that this decision was based on comments we received on our various proposals indicating that the proposed limits likely relied on incorrect data. We explained that we had issued an Information Collection Request (ICR) under CAA section 114 for purposes of obtaining the requisite data. 80 FR 45293. Since then, we have received and evaluated responses to the ICR. More recently, we have received new information and data from a facility that operates FA lines that cast doubts on information and

data that the agency relied on in promulgating the July 2015 final rule emissions limits for FA lines.

C. What is the purpose of this proposal?

This notice proposes the following amendments to the NESHAP for the Wool Fiberglass Manufacturing source category:

- Readopting formaldehyde emission limits from bonded RS lines under CAA section 112(d)(6);
- Establishing new emission limits for methanol from bonded RS lines under CAA section 112(d)(2) and (3);
- Establishing work practice standards for phenol from bonded RS lines under CAA section 112(h);
- Amending the incinerator operating limits to include cooling emissions from both RS and FA limits under CAA section 112(d)(2) and (3);
- Establishing new subcategories of FA lines under CAA section 112(d)(1);
- Establishing new emission limits for formaldehyde, methanol, and phenol from most of the newly proposed FA line subcategories under CAA section 112(d)(2) and (3); and
- Setting work practice standards for phenol from one newly proposed FA line subcategory under CAA section 112(h).

We are requesting comments on only the specific proposed revisions to the Wool Fiberglass Manufacturing NESHAP that are presented in this notice. We are not reopening or accepting comment on any other aspect of the 2015 final rule or prior proposals. Taking final action on the proposed revisions to the standards for RS lines would complete the required CAA section 112(d)(6) review for the Wool Fiberglass Manufacturing NESHAP.

III. What are the proposed rule requirements for RS lines and what is our rationale?

A. What are the proposed rule requirements for formaldehyde emissions from bonded RS lines?

In the July 29, 2015, final rule, we did not finalize the proposed revisions to the formaldehyde, methanol, and phenol emissions limits from bonded RS lines based on comments indicating that emission data we relied on for the proposed limits were not representative of either contemporaneous operations or emissions from bonded RS lines. We explained that the

proposals were based on emissions and process data available to the EPA at the time the various proposals were issued, and since that time, approximately 95 percent of RS lines had undergone process modifications that involved phasing out the use of a phenol-formaldehyde (PF) binder and switching to HAP-free binders. We further explained that we had determined that the product lines continuing to operate using PF binders are not similar to the tested product lines in size, end use, production rate, or loss on ignition (LOI) percent. In sum, we posited that available data did not represent current industry conditions, most notably, the significant reduction in the use of PF binders in wool fiberglass manufacturing. We further explained that we had issued an ICR, pursuant to our authority under CAA section 114, to wool fiberglass facilities that operate bonded RS lines in order to obtain updated emissions, process, and control device data for existing RS manufacturing lines. 80 FR 45293. The first part of the ICR requested general information regarding RS line process equipment and control devices. ICR Part 1. Based on the information obtained under ICR Part 1, the EPA issued the second part of the ICR that required facilities to conduct emissions testing for formaldehyde, methanol, and phenol from bonded RS line processes. ICR Part 2. Specifically, ICR Part 2 required subject facilities to collect stack emissions data from RS lines during several testing events that represented operations during multiple seasonal ambient conditions. In response to ICR Part 2, the EPA received emissions test reports from the Johns Manville, Knauf Insulation, and Owens Corning facilities. Table 2 of this preamble summarizes the sampling program conducted under ICR Part 2.

Table 2. Summary of RS Line Test Program

Facility	Bonded RS Line	Test Dates	Sampling Locations
Johns Manville – Defiance, OH	Line 89	6/28/2016, 8/24/2016	Collection Module A (Venturi scrubber 1 outlet)
			Cooling table (Venturi scrubber 2 outlet)

Table 2. Summary of RS Line Test Program

Facility	Bonded RS Line	Test Dates	Sampling Locations
			Curing oven (regenerative thermal oxidizer (RTO) outlet)
Knauf Insulation - Shelbyville, IN	Lines 611, 612, 613, and 614	6/15/2016, 8/2/2016	Combined exhaust from Lines 611-614 forming process and Lines 613 and 614 cooling process (wet electrostatic precipitator outlet)
			Curing oven (RTO outlet)
Owens Corning - Waxahachie, TX	Line V1	5/17-18/2016	Forming process (spray chamber outlet)
			Cooling (high-efficiency air filter outlet)
			Curing oven (incinerator outlet)

In reviewing and evaluating responses to the CAA section 114 ICR, we have now determined that there are currently three facilities operating six bonded RS lines, as compared to 54 RS manufacturing lines at the time of our November 2011 proposal (76 FR 72799). As shown in Table 2 of this preamble, we have also determined that all RS lines are equipped with air pollution control devices and, most importantly, that emissions from all RS lines are significantly lower than the existing MACT standards. Additionally, we were able to confirm the phase out or elimination of PF binders which facilities have achieved by switching to HAP-free binders in wool fiberglass manufacturing processes. This is consistent with our November 2011 proposal where we explained that “[d]ue to industry’s efforts to replace phenol-formaldehyde binders more than 95 percent of formaldehyde, phenol and methanol emissions had been reduced (or will be by 2012).” 76 FR 72803.

As previously explained, CAA section 112(d)(6) requires us to “review, and revise as necessary (taking into account developments in practices, processes, and control technologies),

emission standards promulgated under this section.” We have interpreted CAA section 112(d)(6) as providing us the authority “to review the section 112(d) standards considering developments in practices, processes, and control technologies.” 70 FR 2008, April 15, 2008. The agency previously promulgated a limit for formaldehyde emissions from RS lines under CAA 112(d) and, thus, has decided that it is more appropriate to set limits for formaldehyde emissions from RS lines under CAA section 112(d)(6) instead of under CAA section 112(d)(2) and (3), as previously proposed.

As also explained in our November 2011 proposal, our technology review, under CAA section 112(d)(6), focuses on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the 1999 NESHAP was promulgated. Where we identify developments to inform our decision of whether it is “necessary” to revise the emissions standards, we analyze the technical feasibility of applying these developments and the estimated costs, energy implications, non-air environmental impacts, as well as considering the emission reductions. We also consider the appropriateness of applying controls to new sources versus retrofitting existing sources. Based on our analyses of the available data and information, we identified developments in practices, processes, and control technologies.

For RS bonded lines, we considered any of the following to be a “development”:

- Any add-on control technology or other equipment that was not considered during development of the original MACT standards.
- Any improvements in the performance of any add-on control technology or other equipment (that were identified and considered during development of the original MACT standards) that could result in additional emissions reduction.
- Any work practice or operational procedure to reduce emissions that was not identified or considered during development of the original MACT standards.
- Any process changes or pollution prevention alternatives that could be broadly applied to the industry and that was not identified or considered during development of the original MACT standards.

- Any significant changes in the cost (including cost effectiveness) of applying controls (including controls the EPA considered during the development of the original MACT standards).

In addition to reviewing the responses to the ICR, we reviewed facility operating permits and searched the EPA's RACT/BACT/LAER Clearinghouse (RBLC) in our investigation of developments in practices, processes, or control technologies for RS lines at wool fiberglass manufacturing facilities.¹

As shown in Table 2 of this preamble above, various processes on RS lines are equipped with air pollution control devices as compared to at the time of the promulgation of the 1999 MACT. As also previously explained, current formaldehyde emissions are well below the 1999 levels for two reasons:

(1) Almost all bonded lines have replaced the older PF resins with non-PF resins. These reduced the source category formaldehyde emissions by approximately 95 percent:

(2) Improvements in control technology being used have reduced emissions on the remaining lines that still use PF resins.

In light of the most notably significant reduction of formaldehyde emissions, we are, thus, proposing to conclude that there are developments in practices, processes, and control technologies that warrant revisions to the MACT standards for RS lines under CAA section 112(d)(6).

B. What are the proposed rule requirements for methanol emissions from bonded RS lines?

¹ The EPA established the RBLC to provide a central database of air pollution technology information (including technologies required in source-specific permits) to promote the sharing of information on control technologies among regulatory agencies. The RBLC contains over 5,000 air pollution control permit determinations made by states, local, and tribal agencies. Control technologies, classified as Reasonably Available Control Technology (RACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER) apply to stationary sources depending on whether the sources are existing or new, and on the size, age, and location of the facility. BACT and LAER (and sometimes RACT) are determined on a case-by-case basis, usually by state or local permitting agencies.

We are proposing to establish emission standards for methanol emissions from combined fiber/collection, curing, and cooling processes on new and existing bonded RS lines at wool fiberglass manufacturing facilities based on our evaluation of the data submitted in response to the ICR discussed above. These proposed standards differ from the methanol limits proposed in April 2013 and November 2014 under CAA section 112(d)(2) and (3). As previously explained, we did not finalize those proposed standards based on comments we received on our various proposals, indicating that our proposals were premised on questionable data given industry changes since collection of the data. In addition, as previously explained, we issued and collected additional data that is representative of current industry operations under an ICR subsequent to promulgation of our July 29, 2015, final rule. The revised limits proposed in this action are based on data received in response to the recent ICR discussed above.

C. What are the proposed rule requirements for phenol emissions from bonded RS lines?

We are proposing work practice standards for phenol emissions from combined fiber/collection, curing, and cooling processes on new and existing bonded RS lines at wool fiberglass manufacturing facilities under CAA section 112(h). In order to promulgate a work practice standard in lieu of an emission standard, the EPA must demonstrate that measurement of emissions is not practicable due to technological and economic limitations. In the case of bonded RS lines, our review of more recent CAA section 114 test data indicated that over 60 percent of the test results were values showing that phenol emissions in the exhaust gas stream were below the detection limit of EPA Method 318. This proposal represents a change from the standards for phenol emissions from bonded RS lines that were proposed in April 2013 and November 2014.

We regard situations where, as here, the majority of measurements are below detection limits as measurements that are not “technologically practicable” within the meaning of CAA

section 112(h). We reasoned that “application of measurement methodologies” under CAA section 112(h) must also mean that a measurement has some reasonable relation to what the source is emitting (*i.e.*, that the measurement yields a meaningful value). We further explained that unreliable measurements raise issues of practicability, feasibility, and enforceability. Additionally, we posited that the application of measurement methodology would also not be “practicable due to . . . economic limitation” within the meaning of CAA section 112(h) because it would result in cost expended to produce analytically suspect measurements. 78 FR 22387. This proposal to establish a work practice standard for phenol differs from previous proposals where emission limits were proposed for phenol because the EPA has concluded that the data that supported setting emission limits in previous proposals is no longer valid.

We are seeking comments on only these issues or aspects of requirements that are being presented in this notice. We are not reopening any other aspects of the July 29, 2015, final rule and thus, are not soliciting comments on them.

IV. What are the proposed rule amendments resulting from our technology review and our proposed decisions?

A. What are the results and proposed decisions for formaldehyde emissions from RS lines based on our technology review?

We are proposing to readopt the current 1.2 pound per ton (lb/ton) glass pulled emissions limits for formaldehyde from combined fiber/collection, curing, and cooling processes on existing, new, and reconstructed bonded RS lines at wool fiberglass manufacturing facilities under CAA section 112(d)(6) as part of our technology review. Based on the technology review conducted for the bonded RS lines at wool fiberglass manufacturing facilities, we have determined that emissions are well controlled on bonded RS line processes. As previously

explained, our evaluation of the ICR also led us to conclude that actual formaldehyde emissions from RS lines at all wool fiberglass manufacturing facilities are significantly lower than are allowed under the 1999 NESHAP. We believe that reductions in formaldehyde emissions since promulgation of the 1999 MACT rule are mainly directly related to improvements in two areas: (1) improvements in control technology (*e.g.*, improved bag materials, replacement of older baghouses) and (2) the use of electrostatic precipitators. We also note that total formaldehyde emissions have been significantly reduced (by approximately 95 percent) since promulgation of the 1999 NESHAP due primarily to the use of non-PF binders.

Based on these data and new information, we evaluated what formaldehyde emission limit might be appropriate. The EPA's approach for developing the proposed formaldehyde emission limits for existing and new bonded RS lines sources under CAA section 112(d)(6) are explained in the memorandum titled "Technology Review for Formaldehyde Emitted from Rotary Spin Lines," which is available in the docket for this proposed action. Data and information presented in this memorandum could support amended limits of 0.23 lb/ton glass pulled for existing sources and 0.24 lb/ton glass pulled for new sources. Further, according to the emissions data collected from the ICR, all wool fiberglass manufacturing facilities operating bonded RS lines would be able to meet these emission limits, given that the ICR suggests that the formaldehyde emissions from RS lines are much lower than the current MACT standard. Therefore, these limits would not require additional HAP emission controls or limits for other equipment or process. In addition, if adopted, regulated sources would not be expected to incur any additional costs.

However, we are not proposing to lower the formaldehyde limits, and are instead proposing to readopt the current limits. This is because, as previously explained, the source

category has already achieved approximately 95-percent reduction in formaldehyde emissions due to the replacement of the PF binders with non-PF binders, and which, as explained below, results in major sources becoming area sources. We also believe that the industry trend will likely result in the replacement of PF binders completely and, thus, view the lowering of standards as likely penalizing sources that have been slower in embracing the industry trend. As also previously explained, our review of the ICR indicated that all bonded RS lines are equipped with air pollution control devices as compared to the time of promulgation of the 1999 MACT standards, and that these various control technologies have resulted in significantly lower emissions than the existing MACT standards. We believe that sources will not uninstall these control technologies at this stage and, thus, that the lower emissions remain somewhat assured even without our lowering of the existing MACT standards.

As part of the technology review, we also considered mandating the use of non-PF binders for lines currently using them, and/or mandating the use of non-PF binders for all bonded lines. We are not proposing this option, however, because, as explained in our April 15, 2013, proposal, facilities cease to be subject to the major source standards once they phase out the use of PF binders. “A facility that does not use phenol-formaldehyde binders does not manufacture a bonded product, and therefore does not have a rotary spin manufacturing line or a flame attenuation manufacturing line as defined in the NESHAP. If the facility does not have a rotary spin manufacturing line or a flame attenuation manufacturing line it does not meet the definition of wool fiberglass manufacturing facility and therefore, would no longer be subject to the Wool Fiberglass Manufacturing NESHAP,” 78 FR 22375, April 15, 2013. As also previously explained, industry continues to actively engage in the phase-out of PF binders and have achieved approximately 95-percent reduction in formaldehyde emissions as a result. We also

believe this industry trend will continue given industry indications that non-PF binders are actually less expensive than PF binders. Therefore, cost considerations will move the industry in this direction without the need for regulation.

We also note that for some products, customer specifications preclude the use of any currently available non-PF binders. If PF binders were banned, these products would likely no longer be produced.

We are specifically requesting comment on the proposed readoption of the current formaldehyde limit rather than setting new limits based on information and data submitted under the ICR.

B. What are the proposed requirements for methanol emissions from RS lines?

Based on the new information and data that the agency received pursuant to the ICR, we are proposing to establish limits for methanol emissions from combined fiber/collection, curing, and cooling processes on existing, new, and reconstructed bonded RS lines at wool fiberglass manufacturing facilities.

To determine the MACT floor for methanol, we applied the 99-percent upper predictive limit (UPL) method to the best-performing five sources in the test data collected under Part 2 of the ICR. The UPL analysis is explained in the memorandum titled “Development of Proposed Emission Limits for Methanol Emissions from Rotary Spin Lines in the Wool Fiberglass Manufacturing Source Category,” which is available in the docket for this proposed action. We considered beyond-the-floor options for methanol for all combined collection and curing operation designs as required by CAA section 112(d)(2). However, we are not proposing any limits based on the beyond-the-floor analyses for methanol for these sources because of the potential adverse impacts of additional controls, including the cost of control devices, non-air

environmental impacts, and energy implications associated with use of these additional controls. The beyond-the-floor analysis is presented in the memorandum titled “Control Costs for Rotary Spin Lines,” which is available in the docket for this proposed action. Table 3 of this preamble presents the proposed methanol emission limits for the combined fiber collection/formation, curing, and cooling processes on existing, new, and reconstructed RS lines at wool fiberglass manufacturing facilities.

Table 3. Proposed Methanol Emission Limits (lb/ton of glass pulled) for RS Lines

Existing Sources	New and Reconstructed Sources
1.06	0.65

The emission limits for methanol in this proposed action, if finalized, would codify the level of emissions currently being achieved on RS line processes by add-on control devices (*e.g.*, gas scrubbers, thermal oxidizers).

This proposal differs from and modifies our prior proposals. Details regarding previously proposed methanol emission limits can be found in the April 2013 (78 FR 22387) and November 2014 (79 FR 68029) proposals.

C. What are the proposed requirements for phenol emissions from RS lines?

We are proposing to establish work practice standards for phenol emissions from combined fiber/collection, curing, and cooling processes on existing, new, and reconstructed bonded RS lines at wool fiberglass manufacturing facilities under CAA section 112(h). The EPA’s review of the test data collected under Part 2 of the ICR identified that approximately 60 percent of the concentration values were reported as below the detection limit of EPA Method 318 (Extractive Fourier Transform Infrared (FTIR) Method for Measurement of Emissions from the Mineral Wool and Wool Fiberglass Industries). Considering statistical validity, we concluded

that, in cases where at least 55 percent of the test data are below the detection limit of the respective test method, it is not feasible to prescribe or enforce an emission standard for phenol from RS lines. Under CAA section 112(h), we are instead proposing a work practice that represents MACT.

To identify an appropriate work practice standard for phenol, the EPA reviewed the current NESHAP requirements regarding testing, monitoring, and recordkeeping of resins and binders used in manufacturing wool fiberglass products. The EPA also discussed possible phenol work practice standards with industry representatives.

Because of difficulties in measuring phenol, we cannot develop numerical emission limits; however, we believe that a requirement to establish the free-phenol content of the binder resin used during the compliance demonstration for formaldehyde and methanol and the associated recordkeeping requirements for resin shipments and binder formulations represents MACT for phenol. Consequently, we are proposing to require owners or operators to establish the free-phenol content of the binder resin used during the formaldehyde and methanol compliance demonstration based on vendor specifications, and to require recordkeeping of the free-phenol contents of each resin shipment received and each resin used in binder formulation. We are also proposing to revise the emission standards specified in 40 CFR 63.1382(c)(9) to require that owners or operators must not use a resin in binder formulations that contains a higher free-phenol content than they established during the initial or 5-year compliance demonstrations for formaldehyde and methanol.

This proposal differs from and modifies our prior proposals. Details regarding previously proposed phenol emission limits can be found in the April 2013 (78 FR 22387) and November 2014 (79 FR 68029) proposals.

D. What compliance dates are we proposing?

We are proposing that wool fiberglass manufacturing facilities that operate bonded RS lines that commenced construction or reconstruction on or before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** must demonstrate compliance with the requirements of this subpart no later than 2 years after the effective date of this rule. Affected sources that commenced construction or reconstruction after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** must demonstrate compliance with the requirements of this subpart no later than the effective date of the rule or upon start-up, whichever is later. CAA section 112(i)(3) requires that existing sources must comply as expeditiously as practicable, but no later than 3 years after promulgation of standards under CAA section 112(d). (“Section 112(i)(3)'s three-year maximum compliance period applies generally to any emissions standard . . . promulgated under [section 112].” *Ass’n of Battery Recyclers v. EPA*, 716 F.3d 667, 672 (D.C. Cir. 2013)). This proposal reflects our belief that sources would need this amount of time to comply with the various proposed requirements and is a result of our review of the more recent information and data that these proposed requirements are based on. For instance, the proposed work practice standards for phenol, which call for vendor specifications, would likely require vendor bids and selections as well as time to establish the free-phenol content of binder resin and the likely institution of new practices to address the record keeping requirements when finalized.

V. What other changes are we proposing to the NESHAP in this action?

In this action, we are also proposing amendments to the incinerator operating limits specified in 40 CFR 63.1382(c)(6) to clearly indicate that the subsection applies to cooling emissions. -Incinerators would be required to control the final formaldehyde, methanol, and,

where applicable, phenol emissions from forming, curing, and cooling processes on both FA and bonded RS lines.

We are proposing to allow owners or operators that conducted emissions tests in 2016 in response to the EPA's ICR to submit those performance test results to demonstrate initial compliance with the new methanol emission limits for RS lines, rather than conducting additional tests.

VI. What are the proposed amendments applicable to FA lines?

We are proposing the following three subcategories for FA lines based on recent information indicating that there are technical or design differences that distinguish sources that utilize FA lines: (1) Aerospace and Air Filtration (Aerospace); (2) Heating, Ventilation, and Air Conditioning (HVAC); and (3) Original Equipment Manufacturer (OEM). (In establishing standards under CAA section 112(d), the EPA may “distinguish among classes, types, and sizes of sources within a category or sub-category.” CAA section 112(d)(1). *NRDC v. EPA*, 489 F.3d 1364 (D.C. Cir. 2007)). We are also proposing revisions to the July 2015 final rule formaldehyde, methanol, and phenol limits to reflect these new subcategories.²

In March 2017, the EPA received notification from Johns Manville that several of the emission test reports the company submitted to the EPA to support development of the 2015 NESHAP emission limits for FA lines contained errors in the analytical results for formaldehyde, methanol, and phenol. According to Johns Manville and their testing contractor, the errors caused the test run-level values for pollutant mass to be biased low, particularly for methanol and phenol (*i.e.*, actual pollutant emissions were higher than reported). Johns Manville provided the corrected reports for the facilities affected by the miscalculations to the EPA after promulgation

² On July 27, 2017, the EPA published a direct final rule to extend the compliance date for the FA lines in order to provide time for the EPA to review new emissions data and revise the standards where appropriate.

of the July 29, 2015, final rule. Upon further review of the data, including the rationale for setting the 2015 NESHAP emission limits, the EPA has determined that there are several technical questions regarding the 2015 NESHAP emission limits that cannot be resolved using the corrected reports provided by Johns Manville. Consequently, in May 2017 Johns Manville provided the EPA with more recent test data for FA lines that were collected in 2016 and 2017.

The EPA's review of the new test data confirmed that all FA line emissions points at each facility were sampled and pollutant concentrations were measured using test methods allowed by 40 CFR 63, subpart NNN (EPA Methods 316 and 318 for formaldehyde, EPA Methods 308 and 318 for methanol, and EPA Method 318 for phenol). However, the EPA identified that the phenol emissions from certain FA lines were 1 to 2 orders of magnitude higher than the phenol emissions from other FA lines. The EPA discussed this observation with Johns Manville representatives who acknowledged that they use different binder formulations on certain FA lines to manufacture specific types of wool fiberglass products, and that the different binder formulations result in higher or lower phenol emissions, depending on the composition of the binder. As previously explained, in cases where we identify differences in size, class, or type that significantly affect emissions levels, we may create subcategories when setting emission limits. This is the case here, where the phenol content of the resins is different based on the product type. The industry identified three types of FA line products: (1) Aerospace; (2) HVAC; and (3) OEM. The type of product determines the phenol content of the resin and, ultimately, the level of phenol emissions.

Based on the EPA's review of the new emissions data, the EPA is proposing standards for the three subcategories of FA line products as shown in Table 4.

Table 4. Proposed Emission Limits for FA Lines (lb/ton)

Subcategory	Pollutant	Existing Sources	New and Reconstructed Sources
Aerospace	Formaldehyde	26.25	16.83
	Methanol	8.69	3.98
HVAC	Formaldehyde	2.81	2.38
	Methanol	7.29	1.44
	Phenol	0.38	0.38
OEM	Formaldehyde	4.66	2.60
	Methanol	5.32	0.98
	Phenol	27.19	20.69

For the Aerospace subcategory, we are proposing a work practice standard that represents MACT for phenol because approximately 80 percent of the available phenol data are below the detection limit of the respective test method. Consistent with our proposed work practice for phenol emissions from RS lines, we are proposing to require owners or operators to establish the free-phenol content of the binder resin used during the formaldehyde and methanol compliance demonstration for the Aerospace subcategory, based on vendor specifications, and to require recordkeeping of the free-phenol contents of each resin shipment received and each resin used in binder formulation. We are also proposing to revise the emission standards specified in 40 CFR 63.1382(c)(9) to require that owners or operators must not use a resin in binder formulations that contain a higher free-phenol content than they established during the initial or 5-year compliance demonstrations for formaldehyde and methanol.

We are specifically requesting comments and supporting process and emissions data related to the proposed revisions to the promulgated emissions limits for FA lines.

VII. Summary of Cost, Environmental and Economic Impacts

A. How many sources are affected?

Based on the responses to the 2016 ICR, only three wool fiberglass manufacturing facilities continue to use RS lines to manufacture a bonded product. These three facilities operate six bonded RS lines that would be affected by the revised emission limits. The EPA is not currently aware of any planned or potential new or reconstructed bonded RS lines.

B. What are the air quality impacts?

The proposed standards codify and maintain the emissions reductions achieved by the industry due primarily to the phase-out of PF binders since promulgation of the 1999 NESHAP. Based on the test data received in response to the CAA section 114 ICR, all facilities with bonded RS lines currently meet the proposed emission limits for formaldehyde and methanol. Therefore, the proposed emission limits for formaldehyde and methanol will not result in further HAP emissions reductions. Also, we do not anticipate secondary environmental impacts from the proposed amendments to the Wool Fiberglass Manufacturing NESHAP because owners or operators will not need to install additional control devices to meet the proposed standards.

C. What are the cost impacts?

Because the existing facilities will not need to install add-on control devices or implement process modifications to comply with the proposed emissions standards, and because the EPA is allowing facilities to use the test reports submitted in response to the ICR Part 2 to demonstrate initial compliance with the proposed emission limits, the three facilities subject to the proposed emission limits will not incur increased costs for installing or upgrading emissions control systems. However, the three facilities subject to this proposal will each incur costs (\$4,377/year/facility, 2016 dollars) related to the submission of initial notifications and notifications of compliance status for the formaldehyde and methanol emission limits, and additional monitoring and recordkeeping activities related to the phenol work practice standard.

D. What are the economic impacts?

Economic impact analyses evaluate changes in market prices and output levels. If changes in market prices and output levels in the directly affected markets are significant, impacts on other markets are also examined. Both the magnitude of costs needed to comply with the rule and the distribution of these costs among affected facilities can have a role in determining how the market will change in response to a rule.

The proposed standards for RS lines at wool fiberglass facilities do not impose control costs or additional testing costs on affected facilities. However, affected facilities will have reporting requirements (*i.e.*, an initial notification and a notification of compliance status) associated with the proposed formaldehyde and methanol emission limits and monitoring and recordkeeping requirements associated with the phenol work practice standard. We estimate that the total annual burden for each facility associated with the proposed monitoring, reporting, and recordkeeping requirements to be approximately \$4,377/year/facility, and the total annual cost of this proposal is approximately \$13,131/year (2016 dollars). The economic impacts associated with the costs of this proposal are quite low; each affected firm is estimated to experience an impact of less than 0.01 percent of their revenues.

E. What are the benefits?

Based on the data collected under ICR Part 2, the actual formaldehyde emissions from all bonded RS lines are lower than the level allowed under the 1999 NESHAP. Although the proposed standards do not achieve further emissions reductions, the proposed emission limits for formaldehyde and methanol ensure that the emissions reductions that have been achieved since promulgation of the original 40 CFR 63, subpart NNN in 1999 will persist into the future and that emissions will not increase.

VIII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at

<https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This proposed action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 1160.10. This action does not change the information collection requirements.

C. Regulatory Flexibility Act (RFA)

I certify that this proposed action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. None of the three entities affected by this proposal are small entities, using the Small Business Administration definition of small business for the affected NAICS code (327993), which is 1,500 employees for the ultimate parent company.

D. Unfunded Mandates Reform Act (UMRA)

This proposed action does not contain any unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The proposed action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This proposed action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This proposed action does not have tribal implications, as specified in Executive Order 13175. This proposed action would revise the existing emissions limit for formaldehyde and establish new emission limits for methanol and a work practice standard for phenol emissions. Thus, Executive Order 13175 does not apply to this proposed action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This proposed action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use

This proposed action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

This proposed action involves technical standards. Therefore, the EPA conducted searches for the Wool Fiberglass Manufacturing Area Source NESHAP through the Enhanced National Standards Systems Network (NSSN) Database managed by the American National

Standards Institute (ANSI). We also contacted voluntary consensus standards (VCS) organizations and accessed and searched their databases.

As discussed in the November 2014 supplemental proposal (79 FR 68029), under 40 CFR part 63, subpart NNN, we conducted searches for EPA Methods 5, 318, 320, 29, and 0061 of 40 CFR part 60, Appendix A. These searches did not identify any VCS that were potentially applicable for this rule in lieu of EPA reference methods.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). It does not establish an environmental health or safety standard. This action would make corrections and updates to an existing protocol for assessing the precision and accuracy of alternative test methods to ensure they are comparable to the methods otherwise required; thus, it does not modify or affect the impacts to human health or the environment of any standards for which it may be used.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements, Wool fiberglass manufacturing.

Dated: August 18, 2017.

E. Scott Pruitt,
Administrator.

For the reasons stated in the preamble, the EPA proposes to amend title 40, chapter I, part 63 of the Code of the Federal Regulations as follows:

PART 63 -- NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart NNN-National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing

2. Section 63.1381 is amended by adding the definitions, in alphabetical order, for “Aerospace and Air Filtration Products,” “Heating, Ventilation, and Air Conditioning (HVAC) Products,” and “Original Equipment Manufacturer (OEM) Products” to read as follows:

§63.1381 Definitions.

* * * * *

Aerospace and air filtration products means bonded wool fiberglass insulation manufactured for the thermal and acoustical insulation of aircraft and/or the air filtration markets.

* * * * *

Heating, ventilation, and air conditioning (HVAC) products means bonded wool fiberglass insulation manufactured for use in HVAC systems for the distribution of air or for thermal and acoustical insulation of HVAC distribution lines.

* * * * *

Original equipment manufacturer (OEM) products means bonded wool fiberglass insulation manufactured for OEM entities that fabricate the insulation into parts used as thermal or acoustical insulation in products including, but not limited to, appliances, refrigeration units, and office interior equipment.

* * * * *

3. Section 63.1382 is amended by revising paragraphs (c)(6), (c)(8)(i), and (c)(9) to read as follows:

§63.1382 Emission standards.

* * * * *

(c) * * *

(6) The owner or operator must operate each incinerator used to comply with the emissions limits for rotary spin or flame attenuation lines specified in Table 2 to this subpart such that any 3-hour block average temperature in the firebox does not fall below the average established during the performance test as specified in §63.1384.

* * * * *

(8) * * *

(i) The owner or operator must initiate corrective action within 1 hour when the monitored process parameter level(s) is outside the limit(s) established during the performance test as specified in §63.1384 for the process modification(s) used to comply with the emissions limits for rotary spin or flame attenuation lines specified in Table 2 to this subpart, and complete corrective actions in a timely manner according to the procedures in the operations, maintenance, and monitoring plan.

* * * * *

(9) The owner or operator must use a resin in the formulation of binder such that the free-formaldehyde and free-phenol contents of the resin used do not exceed the respective ranges contained in the specification for the resin used during the performance test as specified in §63.1384.

* * * * *

4. Section 63.1383 is amended by revising paragraphs (g)(1), (h), (i)(1), and (j) to read as follows:

§63.1383 Monitoring requirements.

* * * * *

(g) * * *

(1) The owner or operator who uses an incinerator to comply with the emissions limits for rotary spin or flame attenuation lines specified in Table 2 to this subpart shall install, calibrate, maintain, and operate a monitoring device that continuously measures and records the operating temperature in the firebox of each incinerator.

* * * * *

(h) The owner or operator who uses a wet scrubbing control device to control formaldehyde and methanol emissions must install, calibrate, maintain, and operate monitoring devices that continuously monitor and record the gas pressure drop across each scrubber and the scrubbing liquid flow rate to each scrubber according to the procedures in the operations, maintenance, and monitoring plan. The pressure drop monitor must be certified by its manufacturer to be accurate within ± 250 pascals (± 1 inch water gauge) over its operating range, and the flow rate monitor must be certified by its manufacturer to be accurate within ± 5 percent over its operating range. The owner or operator must also continuously monitor and record the feed rate of any chemical(s) added to the scrubbing liquid.

* * * * *

(i) * * *

(1) The owner or operator who uses process modifications to control formaldehyde and methanol emissions must establish a correlation between formaldehyde and methanol emissions and the process parameter(s) to be monitored.

* * * * *

(j) The owner or operator must monitor and record the free-formaldehyde and free-phenol content of each resin shipment received and of each resin used in the formulation of binder.

* * * * *

5. Section 63.1384 is amended by revising introductory paragraph (a), (a)(3), (a)(9), and introductory paragraph (c) to read as follows:

§63.1384 Performance test requirements.

(a) The owner or operator subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission limits in §63.1382. Compliance is demonstrated when the emission rate of the pollutant is equal to or less than each of the applicable emission limits in §63.1382. The owner or operator shall conduct the performance test according to the procedures in 40 CFR part 63, subpart A and in this section. If the owner or operator conducted an emissions test in 2016 according to the procedures specified in §63.1384(a)(9) and §63.1385 in response to the EPA's Information Collection Request, the owner or operator can use the results of the emissions test to demonstrate initial compliance with the emission limits for rotary spin lines specified in Table 2 to this subpart.

* * * * *

(3) During each performance test, the owner or operator must monitor and record the glass pull rate for each glass-melting furnace and, if different, the glass pull rate for each rotary spin manufacturing line and flame attenuation manufacturing line. Record the glass pull rate

every 15 minutes during any performance test required by this subpart and determine the arithmetic average of the recorded measurements for each test run and calculate the average of the three test runs. If a rotary spin or flame attenuation line shares one or more emissions points with another rotary spin or flame attenuation line(s), owners or operators can conduct the performance test while each of the process lines with the shared emissions point(s) is operating as specified in paragraph (a)(8) of this section, rather than testing each of the shared lines separately. In these cases, owners or operators must use the combined glass pull rate for the process lines with the shared emissions point(s) to demonstrate compliance with the emissions limits specified in Table 2 to this subpart.

* * * * *

(9) The owner or operator of each rotary spin manufacturing line and flame attenuation manufacturing line regulated by this subpart must conduct performance tests using the resin with the highest free-formaldehyde content. During the performance test of each rotary spin manufacturing line and flame attenuation manufacturing line regulated by this subpart, the owner or operator shall monitor and record the free-formaldehyde and free-phenol contents of the resin, the binder formulation used, and the product LOI and density.

* * * * *

(c) To determine compliance with the emission limits specified in Table 2 to this subpart, for formaldehyde and methanol for RS manufacturing lines; formaldehyde, phenol, and methanol for FA manufacturing lines; and chromium compounds for gas-fired glass-melting furnaces, use the following equation:

* * * * *

6. Section 63.1385 is amended by revising paragraph (a)(8) as follows:

§63.1385 Test methods and procedures.

(a) * * *

(8) Method contained in appendix B of this subpart for the determination of the free-formaldehyde content of resin. The owner or operator shall use vendor specifications to determine the free-phenol content of resin.

* * * * *

7. Section 63.1386 is amended by revising paragraph (d)(2)(v) to read as follows:

§63.1386 Notification, recordkeeping, and reporting requirements

* * * * *

(d) * * *

(2) * * *

(v) The free-formaldehyde and free-phenol contents of each binder batch and the LOI and density for each product manufactured on a rotary spin manufacturing line or flame attenuation manufacturing line subject to the provisions of this subpart, and the free-formaldehyde and free-phenol contents of each resin shipment received and of each resin used in the binder formulation;

* * * * *

8. Table 2 to subpart NNN of part 63 is amended by:

- a. Revising entries 7 and 8;
- b. Redesignating entries 9 through 13 as entries 11 through 15;
- c. Adding new entries 9 and 10;
- d. Revising newly redesignated entries 13 through 15;
- e. Adding new entries 16 through 19; and
- g. Adding new footnote 5.

The revisions and additions read as follows:

TABLE 2 TO SUBPART NNN OF PART 63 – EMISSIONS LIMITS AND COMPLIANCE DATES

If your source is a:	And you commenced construction:	Your emission limits are:¹	And you must comply by:²
* * * * *			
7. Rotary spin manufacturing line	On or before March 31, 1997	1.2 lb Formaldehyde per ton of glass pulled ⁵	June 14, 2002.
8. Rotary spin manufacturing line	After March 31, 1997	0.8 lb Formaldehyde per ton of glass pulled ⁵	June 14, 1999.
9. Rotary spin manufacturing line	On or before November 25, 2011	0.32 lb formaldehyde per ton of glass pulled 1.06 lb methanol per ton of glass pulled	Date 3 years after publication of the final rule.
10. Rotary spin manufacturing line	After November 25, 2011	0.24 lb formaldehyde per ton of glass pulled 0.65 lb methanol per ton of glass pulled	Date of publication of the final rule. ⁴
11. Flame attenuation line manufacturing a heavy-density product	After March 31, 1997 but on or before November 25, 2011	7.8 lb formaldehyde per ton of glass pulled ⁵	June 14, 1999.
12. Flame attenuation line manufacturing a pipe product	On or before March 31, 1997	6.8 lb formaldehyde per ton of glass pulled ⁵	June 14, 2002.
13. Flame attenuation line manufacturing a pipe product	After March 31, 1997 but before November 25, 2011	6.8 lb formaldehyde per ton of glass pulled ⁵	June 14, 1999.
14. Flame attenuation line manufacturing an Aerospace product	On or before November 25, 2011	26.25 lb formaldehyde per ton of glass pulled 8.69 lb methanol per ton of glass pulled	Date 1 year after publication of the final rule.
15. Flame attenuation line manufacturing an Aerospace product	After November 25, 2011	16.83 lb formaldehyde per ton of glass pulled 3.98 lb methanol per ton of glass pulled	Date of publication of the final rule. ⁴

16. Flame attenuation line manufacturing an HVAC product	On or before November 25, 2011	2.81 lb formaldehyde per ton of glass pulled 7.29 lb methanol per ton of glass pulled 0.38 lb phenol per ton of glass pulled	Date 1 year after publication of the final rule.
17. Flame attenuation line manufacturing an HVAC product	After November 25, 2011	2.38 lb formaldehyde per ton of glass pulled 1.44 lb methanol per ton of glass pulled 0.38 lb phenol per ton of glass pulled	Date of publication of the final rule. ⁴
18. Flame-attenuation line manufacturing an OEM product	On or before November 25, 2011	4.66 lb formaldehyde per ton of glass pulled 5.32 lb methanol per ton of glass pulled 27.19 lb phenol per ton of glass pulled	Date 1 year after publication of the final rule.
19. Flame-attenuation line manufacturing an OEM product	After November 25, 2011	2.60 lb formaldehyde per ton of glass pulled 0.98 lb methanol per ton of glass pulled 20.69 lb phenol per ton of glass pulled	Date of publication of the final rule. ⁴

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⁵ This limit does not apply after date 3 years after publication of the final rule.